

Water Resource Scarcity in Africa

A photograph of a woman in a yellow patterned dress and blue headwrap walking through a muddy, shallow pond. She is carrying a child on her back. The background shows a dry, rural landscape with sparse trees and small buildings under a clear sky.

Kodjo Amegee

**International Geosphere Program on Climate
Change for Sub-Sahara Africa**

Introduction

- ▶ **UN Millennium Development Goal: “... *cut by half the number of people who do not have access to clean water by 2015 ...*”**
- ▶ **Personal experience: Drought and water scarcity in Guerin-Kouka, Togo 1971**

Sustainable Water Resource Development

► Impacts of Climate Change

- ***Rainfall decrease by 25 % in some areas***
- ***River discharge dropped by 45 %***
- ***Electric power shortage at Akosombo Dam***
- ***Added impact of harbor construction: Ghana, Togo and Benin***

Sustainable Water Resource Development

▶ Hydrologic Database Improvement

- ***Weather stations – little concern before 1931***
- ***Need for hydro-meteorological datasets***

Sustainable Water Resource Development

▶ Technology Transfer and Capacity Building

- ***Transfer of equipment, computer models and other software***
- ***Training: Workshops, short courses, scientist exchange***
- ***START and Repertoire of African scientists involved in IGBP programs***

Sustainable Water Resource Development

► Preventing Difficulties

- ***Instrumentation adapted to local conditions***
- ***Technician training for research equipment maintenance***
- ***Prevent partisan nomination of project managers***
- ***Solving language barrier problems by translation***
- ***Water law and policy to solve conflicts among riparian countries***

Conclusion

- ▶ **Safe water available to rich and poor of the world: “... *the right to live life ...*”**
- ▶ **Technology transfer: *Just a dream, or a turning point for the continent***

► **Technology transfer: *Just a dream, or a turning point for the continent***

